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# ***AF Serial Number Tracking IPT***

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**DSN 787-5286    18 June 2003**



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# ***Overview***

- **AF IPT Mission**
- **DOD Background**
- **USAF Background**
- **SNT Analysis**
- **AF CONOPs**
- **SNT Implementation**
- **Significant Issues**





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# ***AF IPT Mission***

- **Design and implement a Serial Number Tracking and management capability for the U.S. Air Force**
- **Coordinate with other organizations and services for DOD Serial Number Tracking program implementation**





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# ***SNT Benefits***

## ■ **Acquisition/Engineering**

- **Part Mark, Birth Certificate, Warranty Management, OSS&E, Configuration Management, Safety of Flight/High Dollar/Time Critical Item Management**

## ■ **Supply**

- **Inventory Accuracy, Material Management, Item Visibility by SN, Fraudulent Part Identification**

## ■ **Transportation**

- **In-Transit Visibility, Track Transportation Method/Damages**

## ■ **Maintenance**

- **Item Visibility, Cost Control, Repair History, Bad Actor Identification (MTBF), Quality Deficiency Report Tracking, Improved Bills of Material, Engine Stub Time Management**

## ■ **Disposal and Reutilization**

- **Hazardous Materials/Precious Metals Tracking, Demilitarization, Prevent Inappropriate Re-entry of Parts - Surplus/Excess**



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# ***DoD Background***

## ■ **Requirements**

- **ODUSD(L&MR) memo: Serialized Item Management (SIM) of Equipment Maintenance - 4 Sep 02**
- **ODUSD memo: DoD Policy and Implementation for Unique Item Identification (UID) - 19 Dec 02**

## ■ **DoD Goal**

- **Implement policies for uniquely identifying items**

## ■ **Benefits**

- **Integration of item data across all agencies, FMEA**
- **Improved item visibility, management and accountability (CFO Compliance)**



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# ***USAF Background***

## ■ **Requirement**

- **AF CONOPs for Serial Number Tracking (SNT) and Product Marking signed - 27 Feb 03**

## ■ **USAF AIT PMO**

- **Provide standards and technological options/data collection solutions for marking**

## ■ **USAF SNT Team**

- **Support DoD, implement CONOPS, business rules, policy and integrate throughout logistics supply chain and management information systems**
- **AF/ILI Responsibility -- Feb 03**
- **AF IPT Co-Chaired by AF/ILI and AFMC/LGI**

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# ***SNT Analysis***

- **Determined Three Major Considerations for SNT:**
  - **Tracking**
    - Where is the asset?
    - Processes/Business Rules/Requirements
  - **Capabilities**
    - What can I do with serial tracking data?
    - Processes/Business Rules/Requirements
  - **Systems Changes**
    - What changes are necessary to support tracking and capabilities?
    - Processes/Business Rules/Requirements
- **Divided System Life Cycle into major functional areas for analysis:**
  - Acquisition/Manufacturing/Engineering, Transportation, Supply, Maintenance and Disposition





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# ***AF CONOPs***

- **High-level document that provides framework and identifies requirements to track selected assets individually throughout information systems, from cradle to grave**
  - **Items subject to SNT**
  - **Identification and Marking Standards**
  - **Modification of Information Systems**
  - **System Architecture**
  - **Modification of Business Processes**





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# Tracking Vs. Application of SNT

"Tracking" part of Serial Number Tracking					
"Application" enabled by Serial Number Tracking					
Automated Information Systems					
Manufacture/ Acquisition	Inbound Transportation	Supply	Outbound Transportation	Maintenance	Dispositio n

Part mark is common thread

Track	• Production Traceability	• In-Box ITV	• In-Storage visibility	• In-Box ITV	• On/Off Equipment visibility	• Provide item history to buyer
Applications	• Birth Record • Warranty • ID Defects • Configuration Mgmt	• Locate Asset • Match transportation method to item	• Maintenance pull by S/N • Locate Asset • Capital Reporting • In-use Equip	• Locate Asset • Match transportation method to item	• Trend analysis • Manage configuration • Warranty • Bad Actors	• Properly DEMIL
Systems	• SAP • G009	• CMOS • GATES • GTN	• SATS • ILS-S • SCS	• CMOS • GATES • GTN	• Locate Asset • CEMS • CAMS	• DRMO • ITS, PDMSS

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# SNT Implementation

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Analysis

Recommendation

Concept Demo

Implementation

Mar - Jun 03

Jul 03

Aug - Dec 03

Jan 04 - Dec 08

## Develop Deliverables

- Design Roadmap
- Review Existing Requirements and Processes
  - AF, DoD, DLA, Other Services
- Determine "As Is"
  - Analyze Current Processes
- Design "To Be"
  - Review existing programs
  - Determine Implementation order

## Provide Deliverables

- Policy
- Requirements
- 06 POM Estimates
- Implementation Plan
  - Cost and schedule
  - Communication Plan
  - Change Management

## Design/Develop/Run Concept Demonstration

- Data/System Interactions
- Operational Simulations
- Review results
- Revise deliverables accordingly

## Drive Spiral Implementation

- Phase 1 - Tracking and some analytical capability
  - Short Term (1 year)
  - Quick wins/"low fruit"
  - Subject to available funding
- Phase 2 - More analytical capability
  - Medium Term (2-3 yrs)
  - Important/Time consuming interfaces
  - Some funding
- Phase 3 - The rest of the analytical capability
  - Long Term (4-5 years)
  - Complex/Enterprise
  - Fully funded

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# ***Significant Issues***

## **Funding**

**AF Funding for IPT,  
MAJCOMs POM for  
SNT program**

## **Policy**

**Work with OSD in  
defining SNT policy**

## **Marking Standards & Technology**

**OSD publish  
approved standards  
& methodologies**

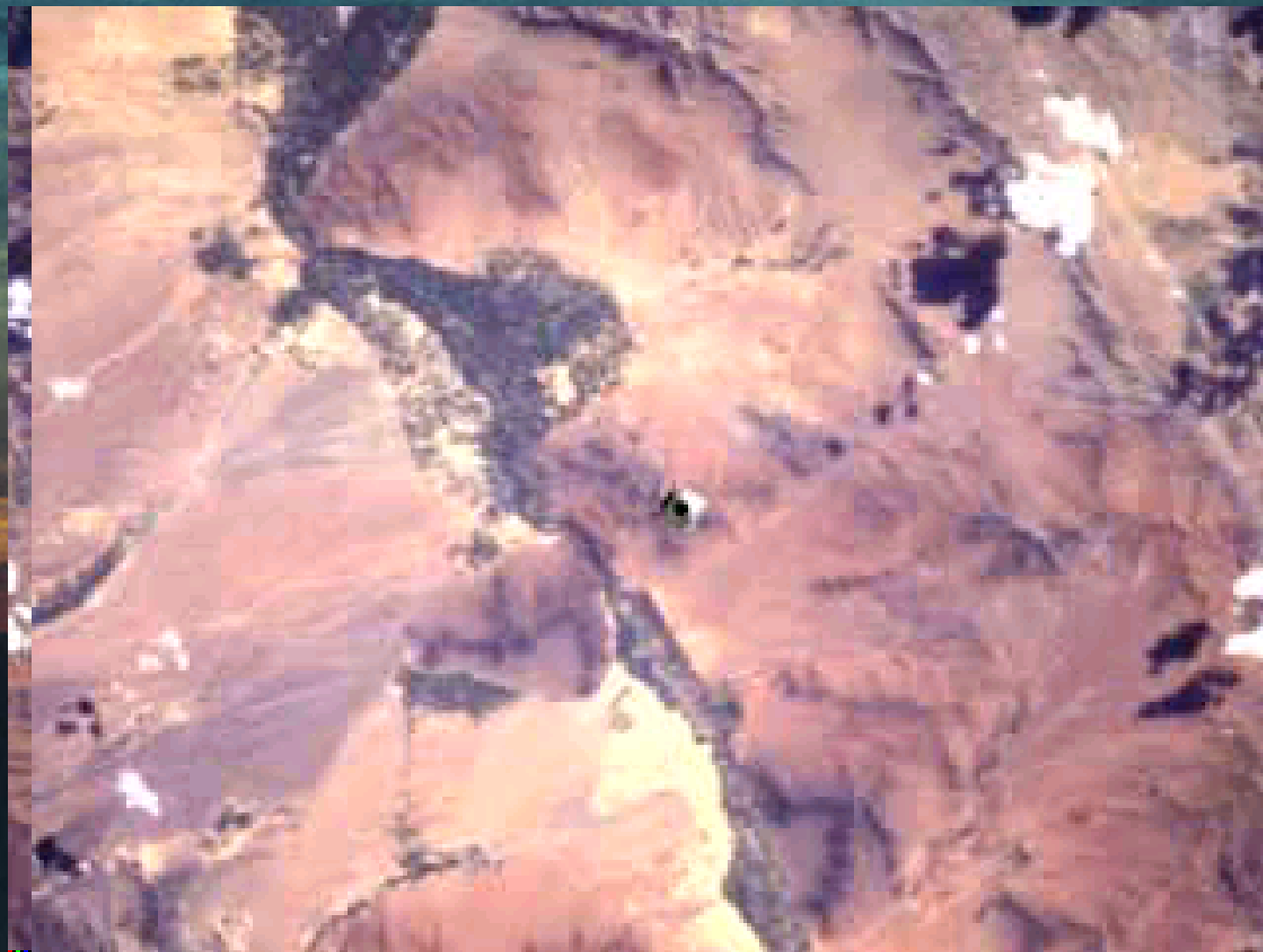
## **Joint Service/ Other Agency Interfaces**

**Coordinate  
activities to  
achieve integrated  
solution**

## **MAJCOM Participation & Buy-in**

**Involve MAJCOMS in  
IPT &  
implementation**







QUESTIONS?



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# ***Milestones***

- **Second SNT IPT Meeting, AFMC Jun 03**
- **DoD Group Reports Jun 03**
- **Third SNT IPT Meeting, DC Jul 03**
- **DoD UID Marking Requirements: Jul 03**
  - **All new Weapon Systems and Major Mods**
  - **DFARS supporting UID requirements**
- **Deliverables: Jul 03**
  - **Requirements, Policy, Roadmap, Implementation Plan**  
**with cost and schedule, 06 POM Requirements**
- **Concept Demonstration (CD) Aug - Nov 03**
- **Recommend actions based on CD Dec 03**
- **Modify Systems for SNT Capabilities TBD**



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# ***Significant Issues/Actions***

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## **Funding**

### **■ Issue:**

- **AF funding for IPT**
- **MAJCOMs POM for SNT Programs**

### **■ Action:**

- **Obtained \$300K from AFMC/LG and AF/ILI.**
- **Submitted BTIP request for CD, May 03**
- **Determining 06 POM Requirements**
- **AFLMA developing benefits/ROI data**





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# ***Significant Issues/Actions***

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## **Policy**

- **Issue:**

- **Work with OSD in defining SNT policy**

- **Action:**

- **Functional Teams developing recommendations**
  - **AF AIT PMO and AF/ILI providing AF input to DoD level IPT groups. (Marking, Legacy Systems)**
  - **SAF/AQX evaluating need for acquisition SNT policy**



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# ***Significant Issues/Actions***

## **Marking Standards and Technology**

### **■ Issue:**

- OSD publish approved standards and methodologies**

### **■ Action:**

- AF AIT PMO is member of International, National, and Industry Standards Organizations, providing DoD and AF input to accommodate current and future SNT requirements**
- AF SNT and AF AIT PMO maintaining currency in latest technology (Equipment, marking capability)**



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# ***Significant Issues/Actions***

## **Joint Service/Other Agency Interfaces\_**

### **■ Issue:**

- Coordinate activities to achieve integrated solution**

### **■ Action:**

- AF SNT IPT working with Navy on implementing Navy SNT concept to track AF repaired USN depot items at OC-ALC (Navy funded)**
- AF SNT IPT working with DLA on business rules and system interfaces for design and future implementation of AF SNT processes**
- Increasing coordination with the Army and other Agencies**



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# ***Significant Issues/Actions***

## **Warfighter Participation and Buy-in**

### **■ Issue:**

- Involve MAJCOMs in IPT and Implementation**

### **■ Action:**

- AF/IL letter solicited participation from MAJCOMs**
- Acquired HQ AF, AFMC, AMC, ACC, AETC, AFSOC, AFSPC, AFLMA, USAFE team members**
- Coordinating with AMC and ACC Senior Leaders**
- Informing MAJCOMs through Articles (Logistics News/Leading Edge) and Briefings (3<sup>rd</sup> AF Maintenance AIT Forum, AFM/MAG)**
- Sending letters to MAJCOMS to identify locally developed SNT capabilities**



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# ***Accomplishments***

- **Acquired Team Members from throughout Air Force**
- **Prepared SOW and Selected Contractor -- KLSS**
- **First Face to Face Conference 30 Apr - 1 May**
- **Drafted Roadmap and Requirements**
- **Finalized Charter**
- **Established “Knowledge Now” website**
- **Developed Initial Functional Analysis**
- **Briefed OASD, Mr Berkson and Mr Mason**
- **Briefed Third Annual Maintenance AIT Forum**
- **Selected Concept Demonstration Approach**
- **Submitted funding requirement for BTIP through AF/IL**
- **Prepared Articles for Logistics Now/Leading Edge**
- **Conducting Weekly IPT Telecons**